

REMARKS

Claims 1-2, 8-9, and 15 have been amended and new claims 22-24 have been added. In view of the above-amendments and the following remarks, Applicant hereby respectfully requests reconsideration of the application, and allowance of claims 1-24.

The Office has rejected claims 1-21 under 35 U.S.C. § 102(e) as being unpatentable over U.S. Patent 6,353,841 to Marshall et al. (Marshall). In particular, with respect to claims 1 and 8, the Office asserts that Marshall teaches a method comprising obtaining information about at least one part of an apparatus (FIG. 9, col. 15, lines 32-36, "Input signals containing dynamic instructions...are received (obtaining information) from connections..."), determining instructions for optimizing at least one operation of the apparatus based on the obtained information (Col. 15, lines 45-50, "The signals input from the wiring network pass through a dynamic instruction enable gate. The function of this gate is to enable either dynamic instruction bits...or to prevent them from being used (determine enable or disable)...This is determined by a single bit of configuration RAM for that ALU...", and applying the instructions to the at least one operation of the apparatus (Col. 15, lines 50-55, "If the dynamic instruction bits are to be used, gate passes the values of I input from the wiring network (applying instructions). If not, then the output of gate will be zero, and the instruction input to the ALU will be that which has already been stored as stored instruction....").

In addition, with respect to claim 15, the Office asserts that Marshall teaches an apparatus comprising one or more parts (Figs. 1 & 2 - shows multiple parts.), an information component for at least one of the part, the information component having data about the at least one part (Col. 6, lines 1-8, "...each ALU has a first pair of 4-bit inputs a, which are directly connected within the ALU, a second pair of 4-bit inputs b...and four 4-bit outputs f...Each ALU also has an independent pair of 1-bit carry inputs..." multiple parts with information), and an optimization processing system that determines instructions for optimizing at least one operation of the apparatus based on the data and applies the instructions to the at least one operation of the apparatus to optimize the performance (Col. 4, lines 31-37, "To allow an individual device to accept or reject dynamic instructions, it is desirable to provide for each of the processing devices a dynamic enable gate to determine

whether instructions to determine the function of the arithmetic logic unit are to be accepted dynamically from the interconnect or are to be provided from configuration memory (optimize performance)...”).

However, Marshall does not disclose, teach, or suggest “obtaining, from at least one part of an apparatus, information about the at least one part of the apparatus” and “determining instructions for optimizing at least one operation of the at least one part of the apparatus based on the obtained information” as recited by claims 1 and 8. Furthermore, Marshall does not disclose, teach, or suggest “an optimization processing system that determines instructions for optimizing at least one operation of the at least one part of the apparatus based on data obtained from the at least one part and applies the instructions to the at least one operation of the apparatus to optimize the performance” as recited by claim 15.

Marshall teaches a reconfigurable device comprising a plurality of processing devices comprising arithmetic logic units (ALU’s). (Abstract). According to Marshall, input signals containing dynamic instructions, which are either obtained from a memory accessible to the wiring network or generated by another ALU in the array, may be provided dynamically to the ALU’s. (See Col. 15, lines 32-45). However, Marshall does not teach or suggest that the dynamic instructions are based on information obtained from the ALU to be optimized or developed to optimize performance of the ALU from which the information is obtained. To the contrary, Marshall teaches that the dynamic instructions may simply be applied to a plurality of ALU’s by way of a dynamic instruction mask to control the circuitry synchronously with the ALU. (Col. 16, 10-24).

Advantageously, the present invention relates to a system and method for optimizing performance of at least one operation of an apparatus using data obtained from at least one part of the apparatus. As is described in the Specification beginning on page 5, para. [0019], information or data is obtained from the at least one part of the apparatus. Then, based on the obtained information, instructions for optimizing at least one operation of the at least one part are determined by an optimization processing system. These instructions are developed, for example, by comparing the obtained information against stored or prior information about the parts and determining instructions to optimize the operation to correct or adjust for the difference. After the instructions are determined based on the obtained information, the instructions are applied to the at least one operation of the apparatus. In this manner, parts

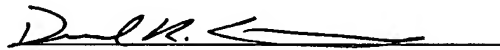
which have relaxed and/or changing tolerances can be used without sacrificing performance of the apparatus. Moreover, when parts of the apparatus are changed or replaced, the system and methods of the present invention are able to dynamically adjust to maintain the optimal and desired level of performance.

Accordingly, in view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw the rejections of claims 1, 8, and 15. Since claims 2-7 and 22 depend from and contain the limitations of claim 1, claims 9-14 and 23 depend from and contain the limitations of claim 8, and claims 16-21 and 24 depend from and contain the limitations of claim 15, they are distinguishable over Marshall and are patentable in the same manner as claims 1, 8 and 15.

In view of all of the foregoing, Applicant submits that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

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